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(54) Title: PROCESS FOR MANUFACTURING ALKANES WITH METHANE

(57) Abstract: The present invention relates to a process for manufacturing alkanes, comprising, as main stage, a reaction resulting from bringing methane into contact with at least one other starting alkane (A) in the presence of a catalyst based on a metal M capable of catalysing a metathesis of alkanes. The reaction results in the formation of at least one or two final alkanes (B) having a number of carbon atoms less than or equal to that of the starting alkane (A) and at least equal to 2. Preferably the catalyst comprises a hydride of a metal M grafted to and dispersed over a solid support. The metal M may be chosen from transition metals, lanthanides and actinides. The present invention also relates to the use of a catalyst capable of catalysing a metathesis of alkanes in a reaction resulting from bringing methane into contact with at least one other starting alkane (A).